



REPEATER & BASE STATION
Operating Specifications

(PC67)

406 to 512 MHz
TRANSMITTER

MODEL SERIES	DUTY CYCLE (EIA)	FCC FILING DATA (450 to 512 MHz)			
		RF POWER OUTPUT RANGE (watts)	PA POWER INPUT MAXIMUM (watts)	TYPE ACCEPTANCE NUMBER	
				2 ppm Stability	0.05 ppm Stability
(†)I45E ...	Intermittent	1 to 20	55	KT-50-D	—
(†)I55E ...	Intermittent	1 to 40	90	KT-53-D	—
(†)I65E ...	Intermittent	10 to 75	180	KT-117-C	—
(†)I75E ...	Intermittent	30 to 100	220	KT-118-C	—
(†)I45 (K, J, R or T) ...	Intermittent	1 to 20	55	KT-51-D	—
(†)I55 (K, J, R or T) ...	Intermittent	1 to 40	90	KT-54-D	—
(†)I65 (K, J, R or T) ...	Intermittent	10 to 75	180	KT-115-C	—
(†)I75 (K, J, R or T) ...	Intermittent	30 to 100	220	KT-116-C	—
(†)C45 ...	Continuous	1 to 20	55	KT-52-D	—
(†)C55 ...	Continuous	1 to 40	90	KT-55-D	—
(†)C65 ...	Continuous	10 to 75	180	KT-113-C	—
(†)C75 ...	Continuous	30 to 100	220	KT-114-C	KT-114-E
VC85 ...	Continuous	100 to 200	500	KT-88-C	KT-88-E

†Cabinet Style (1st Digit D, S, P or V)

All models Type Accepted under FCC Rules Part Nos. 21, 90 & 95A.
16F9 Emission not applicable under Part 95A.

RATED POWER OUTPUT

Typical Models:	DI45 or DC45	DI55 or DC55	DI65 or DC65	DI75 or DC75	VC85
406 to 420 MHz:	20W	40W	75W	100W	200W
420 to 440 MHz:	15W	35W	65W	90W	—
440 to 450 MHz:	15W	30W	60W	80W	—
450 to 470 MHz:	20W	40W	75W	100W	200W
470 to 494 MHz:	20W	40W	65W	90W	200W
494 to 512 MHz:	20W	35W	65W	90W	200W

Adjustable to (for full performance per EIA):

	5W	12W	20W	30W	100W
DI45 or DC45	5W	12W	20W	30W	100W

AUDIO RESPONSE
(EIA RS152B)

Within +1 and -3 dB of
6 dB/octave pre-emphasis
300 to 3000 Hz per EIA

AUDIO DISTORTION:

Less than 2% @ 1000 Hz

RF OUTPUT IMPEDANCE:

50 ohms

FREQUENCY STABILITY:

±0.0002%

With Optional Hi Stab. OSC:

±0.000005%

MULTI-CHANNEL PERFORMANCE:
(Optional 2 to 4 Frequency)

Full Specs	Maximum Freq. Spread (MHz)	
	Lo & Med. Pwr	Hi Pwr
	1 dB Degrad. Power Output	Full Specifications
Tx Freq. Range 406-450:	5.5	9.0
Tx Freq. Range 450-470:	5.5	9.0
Tx Freq. Range 470-494:	5.8	9.5
Tx Freq. Range 494-512:	6.0	9.75

CONDUCTED SPURIOUS & HARMONIC EMISSION:

	@20 W	@40 W	@75 W	@100 W	@200 W
	-85 dB	-85 dB	-85 dB	-85 dB	-70 dB

MODULATION DEVIATION: 0 to ±5 kHz (16F3, 16F9)

FM NOISE: -55 dB

RECEIVER

Receiver Type:	Standard	UHS
SENSITIVITY		
EIA 12 dB SINAD:	0.35 uv	0.20 uv
20 dB Quieting:	0.50 uv	0.25 uv
Noise Squelch:	0.20 uv	0.10 uv
Channel Guard:	8 dB SINAD	

FREQUENCY STABILITY: ±0.0002%

AUDIO RESPONSE:

Within +1 and -8 dB of
6 dB/octave de-emphasis
300 to 3000 Hz per EIA

AUDIO DISTORTION:

Less than 3%

AUDIO OUTPUT:

5 watts into 8 ohm load

SELECTIVITY, EIA SINAD

@±25 kHz:	-90 dB	-90 dB
INTERMODULATION:	-80 dB	-75 dB
SPURIOUS & IMAGE REJECTION:	-100 dB	-90 dB

MULTI-CHANNEL PERFORMANCE
(Optional 2 to 4 Frequency)

	Maximum Freq. Spread (MHz)	
	Full Specs	3 dB Degradation in Sensitivity
Rx Freq. Range 406-450:	1.6	2.0
Rx Freq. Range 450-470:	1.6	2.0
Rx Freq. Range 470-494:	1.8	2.3
Rx Freq. Range 494-512:	1.5	2.0

RF INPUT IMPEDANCE: 50 ohms

CHANNEL SPACING: 25 kHz

MODULATION ACCEPTANCE: ±7.0 kHz

FCC MODEL NUMBER:

ER-65-A

GENERAL ELECTRIC COMPANY • MOBILE COMMUNICATIONS DIVISION
WORLD HEADQUARTERS • LYNCHBURG, VIRGINIA 24502 USA

